



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,296	08/29/2001	Margo N. Whale	10007167-1	6662

7590 03/14/2005
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

KRAMER, JAMES A

ART UNIT PAPER NUMBER

3627

DATE MAILED: 03/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/942,296

Applicant(s)

WHALE, MARGO N.

Examiner

James A. Kramer

Art Unit

3627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 23 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 23 states a laser printer that embodies the system as recited in Claim 16. Claim 16 includes a printing device usage database that stores historical printing device usage for a plurality of customers. As such, Claim 23 claims a laser printer that embodies a printing device usage database that stores historical printing device usage for a plurality of customers.

Examiner asserts that one of ordinary skill in the art would not reasonably know how to provide to a single laser printer, owned by one customer, historical printing device usage for a plurality of customers. To achieve this one of ordinary skill in the art would have to establish a database server inside the printer and then process, receive and store information from the plurality of customers on the server and in the database. Examiner notes that the specification, at the time the application was filed, would not have taught one skilled in the art how to make and/or use the claimed invention without undue experimentation (see MPEP 2164.01).

Art Unit: 3627

Based on Applicant's Specification, in particular Figure 3, Examiner believes Applicant's intention was to limit the printing devices to laser printers. This is how the claim will be interpreted.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3,5,7,12-14 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over LoBiondo et al. in view of Coons et al.

LoBiondo et al. teaches a consumable supplies monitoring/ordering system for reprographic equipment. Specifically, LoBiondo et al. teaches detecting the occurrence of a marketing event for a customer having one or more printing devices, the marketing event regarding printing device replaceable components for use by the printing devices of the customer (column 1; lines 45-51). Examiner notes that Applicant fails to define "marketing event" in the specification. In fact that term is not even introduced until the claims. As such Examiner must give the term it's broadest reasonable interpretation. Therefore, Examiner asserts that submitting order for supplies, as taught by LoBiondo et al. represents a marketing event.

LoBiondo et al. teaches determining a historical printing device usage of the printing devices by the customer (column 2; lines 54-68). Examiner notes that usage information by definition is "historical" since the counters can only track the usage after it happens (i.e. in the past). As such the data stored in the counters of LoBiondo et al. must be historical usage.

Art Unit: 3627

LoBiondo et al. does not teach determining a price for the printing device replacement components based on the historical printing device usage of the customer's printing device nor transmitting a price. Examiner notes that LoBiondo et al. fails to teach any payment techniques.

Coons et al. teaches a usage-based billing and management system and method for printers and other assets. In particular Coons et al. teaches determining a price based for the printing device replacement components based on the historical printing device usage of the printing device and transmitting a price. Examiner first references column 2; lines 44-46, which states that systems are known to track usage from reprographic machines to track the inventory of supplies consumed by those machines. Examiner notes that this represents using the usage of the printing device to track the supplies the machine uses.

Next Examiner references column 8; 49-52 which states that a billing company generates an invoice based on aggregated usage data associated with the assets. Examiner notes that the invoice of Coons et al. is for the consumables, this is supported on column 2; lines 50-56, where Coons et al. states that the purpose of the invention to improve upon systems that transmit requests for consumables but don't support remote access to the usage data. Clearly the invoice generated based on the aggregate usage data is for the consumables ordered.

Additionally, Examiner asserts that aggregated usage represents historical usage, as the usage must have already occurred in order for it to be aggregated or totaled. The system could not aggregate usage that has not happened.

Further, Merriam Webster's Collegiate Dictionary defines invoice as a list of goods specifying the price. Therefore to generate an invoice a price must be determined. Examiner

Art Unit: 3627

asserts, that to generate an invoice based on aggregated usage represents determining a price for the consumables based on the historical usage of the printing devices.

Examiner further notes that an invoice represents a transmitted price. In addition, one of ordinary skill in the art would recognize that an invoices are used in order to facilitate payment.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the consumable supplies monitoring/ordering system of LoBiondo et al. to allow the supplier to generate an invoice (price for consumables) based on the aggregated (historical) usage data associated with the assets (reprographic equipment) as taught by Coons et al. One of ordinary skill in the art would have been motivated to combine the references in order to facilitate payment.

LoBiondo et al. teaches calculating a number of pages printed by a particular brand of printing devices owned by the customer (claim 2). Examiner references column 2; lines 65-68 which states ink consumption (usage) can be derived on the basis of average marking material usage per sheet. Per sheet represents number of pages printed.

Examiner further notes that since LoBiondo et al. teaches the ability to track at least one reprographic machine, therefore in the situation where there is only one machine being tracked, the system inherently tracks the usage of a particular brand, as there would be only one brand.

LoBiondo et al. teaches calculating a number of pages printed by a particular brand of printing devices owned by the customer over a usage time period (claim 3 and 24). Examiner

Art Unit: 3627

references column 2; lines 62-65, “usage information can be derived relating to the number of sheets of each size of paper . . . used in a predetermined time period.”

Examiner notes that “a predetermined time period”, as taught above by LoBiondo et al. represents wherein the usage time period is a fixed time period (claim 5).

LoBiondo et al. teaches that the marketing event comprises receiving an order for one or more replaceable components from the customer. Examiner references column 3; lines 26-30, “At the supplies reordering location, a modem receives data from or provides data to the link. Data from the network comprises primarily orders for supplies consumed in the network.”

Examiner notes that the replaceable component for which a price is determined by LoBiondo et al. in view of Coons et al. represents a device presently ordered (claim 12) and devices that are available for sale (claim 13). Examiner once again references Coons et al. column 8; lines 49-52, specifically that a billing company generates an invoice. Examiner notes that it is obvious when an invoice is generated (determine price) that the product for which the invoice is generated (price determined) is currently ordered. Examiner notes that if the product were not presently ordered, the billing company would not generate an invoice. Additionally, it is obvious that an item which is currently ordered is also available for sale, or it would not have been ordered.

LoBiondo et al. does not teach referring to a pricing table to determine the price as a function of historical pricing device usage (claim 14 and 25). As discussed in detail above, Coons et al. determines price as a function of usage. This is illustrated on column 8; lines 49-52 of Coons et al., "generate an invoice based on aggregate usage data." Coons et al. further teaches that all data used to generate this invoice is managed and stored in a data store or database (column 8; lines 52-57). Examiner notes that the tables within the data store of Coons et al. that are used to generate the invoice represent pricing tables.

Further it would be obvious to one skilled in the art that if price is based on usage, then you will have a first price based on a first amount of usage and second price based on a second amount of usage and that these differences will be stored in the database tables. This is the definition of usage based pricing (i.e. price alters with usage).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the consumable supplies monitoring/ordering system of LoBiondo et al. to allow the supplier to generate an invoice (price for consumables) based on the aggregated (historical) usage data associated with the assets (reprographic equipment) using a pricing table in a data store wherein the price changes based on the amount of usage as taught by Coons et al. One of ordinary skill in the art would have been motivated to combine the references in order to facilitate payment.

Art Unit: 3627

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over LoBiondo et al. in view of Coons et al. as applied to claims 1-3,5,7,12, and 13 above, and further in view of Dictionary of Business Terms.

The combination of LoBiondo et al. in view of Coons et al., as described in detail above does not teach the usage time period is a moving average. Dictionary of Business Terms defines moving average as the average price of inventory, constructed on a fixed period, used to show trends for the latest interval. Dictionary of Business Terms goes on to give the example of the "past 30 days".

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of LoBiondo et al. in view of Coons et al. by defining the predetermined time period of LoBiondo et al. to be a moving average as taught by the Dictionary of Business Terms in order to show trends for the latest interval.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over LoBiondo et al. in view of Coons et al. as applied to claims 1-3,5,7,12, and 13 above, and further in view of Official Notice.

The combination of LoBiondo et al. in view of Coons et al., as described in detail above does not teach calculating the average number of pages printed per month.

Examiner once again points out that LoBiondo et al. teaches that usage information can be derived relating to the number of sheets of each size of paper used in a predetermined time period, however as expressed above LoBiondo et al. fails to specify the exact length of the time period (e.g. a month).

Art Unit: 3627

Examiner takes Official Notice that a month is an old and well known predefined time period used to tabulate information. For instance utility companies bill customers based on monthly usage, banks send out monthly statements and mortgage companies require monthly payments.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of LoBiondo et al. in view of Coons et al. by defining the predetermined time period of LoBiondo et al. as a month as taught by Official Notice. One of ordinary skill in the art would be motivated to modify the references in order to provide users with a standard and well-established time frame.

Claims 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over LoBiondo et al. in view of Coons et al. as applied to claims 1-3,5,7,12, and 13 above, and further in view of Bardenheuer et al.

The combination of LoBiondo et al. in view of Coons et al., as described in detail above does not teach that the marketing event is an inquiry by a user for a price (claim 8).

Bardenheuer et al. teaches a customer request for invoice (Figure 7 and column 10; lines 59-60). Bardenheuer et al. further teaches that this request (or marketing event) triggers the system to provide an invoice to the user (Figure 8 and column 10; lines 66-67).

Examiner once again points out that invoices are defined as a list of goods specifying the price (Merriam Webster's Collegiate Dictionary), therefore to generate an invoice a price must be determined. Examiner notes that when the customer of Bardenheuer et al. requests an

Art Unit: 3627

invoice, the system must first determine the price of the call and then displays that price to the user. Thus Examiner notes that a request for an invoice represents a request for a price.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of LoBiondo et al. in view of Coons et al. to detect the occurrence of the user requesting an invoice (request for price) as taught by Bardenheuer et al. One of ordinary skill in the art would have been motivated to modify the references in order to allow the user to verify the accuracy of the price at any time.

The combination of LoBiondo et al. in view of Coons et al., as described in detail above does not teach that the marketing event is a time for transmitting an unsolicited advertisement to the customer (claim 10).

Bardenheuer et al. teaches at the end of each billing period an invoice will be automatically mailed to the customer (column 2; lines 59-61). Examiner first notes that these automatic invoices are clearly unsolicited. Further, Examiner points out that Applicant fails to clearly define “advertisement” in the Specification and as such Examiner notes that advertisement is defined as the act or process of advertising. Further, advertising is defined as to make something known (Merriam-Webster’s Collegiate Dictionary). Examiner notes that an invoice represents an advertisement as an invoice makes something (i.e. list of items and price) known. As such Bardenheuer et al.’s automatically mailed invoices represent unsolicited advertisements.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of LoBiondo et al. in view of Coons et al. to

Art Unit: 3627

detect the occurrence of sending an monthly invoice (unsolicited advertisement) as taught by Bardenheuer et al. One of ordinary skill in the art would have been motivated to modify the references in order to remind the customer of what they owe and have purchased.

Examiner notes that the invoice of Bardenheuer et al. relates to the cost of a call determined based on customer usage (column 2; lines 53-60). Examiner asserts that the usage based tracking and billing of Bardenheuer et al. makes the references analogous art.

Claims 9, 11, 15 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over LoBiondo et al. in view of Coons et al. as applied to claims 1-3,5,7,12, and 13 above, and further in view of Official Notice (evidence in support of Official Notice includes Applegate et al. and Kanemitsu et al.)

The combination of LoBiondo et al. in view of Coons et al., as described in detail above does not teach that detecting the marketing event comprises receiving a depleted toner cartridge from the customer (claim 9) wherein the toner cartridge has a component memory integrated therewith (claim 11).

Examiner notes that it is old and well known for toner cartridges to include component memory integrated therewith that store machine data (printing device) relating to usage history of the image forming apparatus (for example see: Applegate et al. column 5; lines 7-14). Further it is old and well known to use the information in the memory of the toner cartridge in order to provide both a supplier and the user with reliable data of the used service life (depletion of toner cartridge) (for example see Kanemitsu et al. column 2; lines 63-64). Examiner notes that one of ordinary skill would recognize that the information about the usage history of an image forming

Art Unit: 3627

apparatus captured in the memory of a toner cartridge is useful for tracking the usage of an image forming apparatus that is not connected to a network.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of LoBiondo et al. in view of Coons et al. to include collecting information from the memory chip of toner cartridges associated with image forming apparatus not attached to the network (detecting the occurrence of a depleted toner cartridge wherein the toner cartridge has a component memory integrated therewith). One of ordinary skill would be motivated to combine these references in order to track the usage of an image forming device which is not connected to the network.

The combination of LoBiondo et al. in view of Coons et al., as described in detail above does not teach determining historical printing device usage comprises retrieving a component page count from the component memory that indicates a number of pages printed using the depleted printing device replaceable component and adding the component page count to a cumulative page count to derive a new cumulative page count, the cumulative page count indicating the total number of pages printed by the customer using a printing device replaceable component (claims 11 and 26).

Examiner notes that the combination of LoBiondo et al. in view of Coons et al. teaches tracking a cumulative page count for at least one machine via counters over a network. However, this does not specifically include tracking the information from memory of a received depleted toner cartridges. Examiner once again relies on Official Notice and asserts that it is old and well known in the art for toner cartridges to include component memory integrated therewith

Art Unit: 3627

that store machine data (printing device) relating to usage history of the image forming apparatus (for example see: Applegate et al. column 5; lines 7-14). Also, Examiner once again notes that one of ordinary skill would recognize that the information about the usage history of an image forming apparatus captured in the memory of a toner cartridge is useful for tracking the usage of an image forming apparatus that is not connected to a network.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the inventory tracking process of LoBiondo et al. in view of Coons et al. to include cumulative pages counts captured in the memory devices of depleted toner cartridges as taught by Official Notice and to use these pages counts as part of the aggregate (cumulative) usage information. One of ordinary skill in the art would be motivated to combine these references in order to capture usage information for image forming apparatus not connected to the network.

Examiner notes that the price determined by the combination of LoBiondo et al. in view of Coons et al. and in further view of Official Notice is for a component to replace the depleted component. One of ordinary skill knows that toner cartridges are specific to a particular printer and therefor a user must replace a depleted component with an identical replacement. As such it is inherent that the new component be identical to depleted component (claim 11 and 26) in order for the replacement component to work in the machine.

The combination of LoBiondo et al. in view of Coons et al., as described in detail above does not specifically teach the replaceable component is a laser printer toner cartridge (claims 15

Art Unit: 3627

and 27). LoBiondo et al. specifically teaches reprographic machines. Examiner takes Official Notice that laser printers are old and well-known reprographic machines and therefore laser printer toner cartridges are an old and well-known consumable material for reprographic machines.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the consumable materials of the reprographic machines of LoBiondo et al. in view of Coons et al. to specifically include laser toner cartridges. One of ordinary skill in the art would have been motivated to modify the references in order to track the usage of laser printers owned by the customer.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 16 and 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Coons et al.

Coons et al. teaches a printing device usage database that stores historical printing device usage for a plurality of customers, the historical printing device usage being a number of pages printed by a particular brand of printing device owned by a customer. Specifically, Examiner references column 2; line 66 – column 3; line 17, which teaches a local server and data store

Art Unit: 3627

which captures and aggregates usage data associated with monitored assets of an enterprise.

Coons et al. further teaches a remote server and data store which receives and stores the usage data from the local server and local data store.

Examiner notes that it is inherent to the system of Coons et al. that the remote data store stores usage information for a plurality of enterprises (customers). Support for this assertion is found on column 9; lines 25-43. This passage details the steps followed for Finance Company to retrieve information from the remote server. Specifically, step 2 states, "Finance Company clicks button on a page after selecting an enterprise for which a report is to be generated."

Examiner notes that Webster's II New Riverside Dictionary defines select as: "To pick out or choose from a number of choices." Since the Finance company "selects" an enterprise, it is inherent that there are a plurality of enterprises (customers) to select from and therefore the remote sever necessarily stores information from a plurality of enterprises (customers).

Examiner believes that the above evidence provides a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic (i.e. stores historical printing device usage for a plurality of customers) necessarily flows from the teachings of the applied prior art (MPEP 2112).

Coons et al. teaches a pricing module; and/or a pricing module configured to calculate a price of a printing device replaceable component for sale to a customer, the price being dependent upon the customer's historical printing device usage.

Art Unit: 3627

Examiner references column 8; 49-52 which states that a billing company generates an invoice based on aggregated usage data associated with the assets. First Examiner notes that this represents a module used by the billing company to generate the invoice.

Further, Examiner notes that the invoice of Coons et al. is for consumables, this is supported on column 2; lines 50-56, where Coons et al. states that the purpose of the invention to improve upon systems that transmit requests for consumables but don't support remote access to the usage data. Clearly the invoice is generated for a consumable (printing device replaceable component) based on a customer's aggregated usage data (historical printing device usage).

Examiner asserts that aggregated usage, as applied above represents historical usage, as the usage must have already occurred in order for it to be aggregated or totaled. The system could not aggregate usage that has not happened.

Further, Merriam Webster's Collegiate Dictionary defines invoice as "a list of goods specifying the price." Thus, to generate an invoice or a list of goods specifying the price, a price necessarily will be calculated.

Therefore, Examiner asserts, the module of Coons et al. which generates an invoice based on aggregated usage data represents a pricing module configured to calculate the price of a printing device based on historical printing device usage.

Coons et al. teaches a usage module configured to calculate historical printing device usage for each customer (e.g. column 4; lines 16-18). Examiner notes that Coons et al.'s usage data aggregation system represents a usage module. Once again Examiner points out that

Art Unit: 3627

aggregated data represents historical data since usage cannot be aggregated unless it is historical (i.e. happened already).

Coons et al. teaches a message transmission means for transmitting the calculated price of the printing device replaceable component to the customer. Examiner notes that this is inherent to the system of Coons et al. Examiner once again reference column 8; lines 59-52 and notes that a billing company would not generate an invoice without a means to transmit that invoice to the enterprise (customer).

Coons et al. teaches an order center configured to receive a customer order for one or more printing device replaceable components as required by claim 19 (column 2; lines 39-56). Specifically Coons et al. teaches automatic or semi-automatic ordering over a communications network to a reorder site. The reorder site of Coons et al. represents an order center.

Coons et al. further teaches that the printing device usage is a number of pages printed from the printing device over a usage time. Examiner notes that Coons et al. teaches usage data from networked reprographic machines is supplied to an inventory tracking system for monitoring inventories of supplies consumed by the network. Examiner notes that usage of a printer (reprographic machine) relates specifically to the number of pages printed. Therefore, in order to aggregate this information, as taught by Coons et al. it must be over a period of time.

Claim Rejections - 35 USC § 103

Art Unit: 3627

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coons et al. in view of Hirst et al.

Coons et al. as described above does not teach a recycling center to receive a depleted printing device replaceable component that has component memory integrated therewith in and to retrieve a page count from the component memory, that page count indicating a number of pages printed utilizing the printing device replaceable component.

Hirst et al. teaches consumable products are returned to the manufacturer for recycling upon exhaustion (column 1; lines 29-31). Hirst et al. further teaches storing information within the consumable memory which can be obtained by the manufacturer at a later time. The information can include number of pages printed since last consumable (column 3; lines 15-30). Examiner notes the above teachings of Hirst et al. represent replaceable component with memory for storing page count indicating the number of pages printed utilizing the printing device replaceable component. In addition, the teachings of Hirst et al. represent this a recycling center of a manufacturer who is able to receive the replaceable component and access the information in the memory.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Coons et al. to include a recycling center to receive replaceable components and to retrieve page count information indicating the number of pages

Art Unit: 3627

printed utilizing the replaceable component from the memory of the replaceable component as taught by Hirst et al. One of ordinary skill in the art would be motivated to combine the references as taught in order to provide a communication between the manufacturers of the consumable components regarding consumption rates (Hirst et al. column 2; lines 19-22).

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coons et al. in view of Dictionary of Business Terms.

Examiner notes that Coons et al. teaches usage data from networked reprographic machines is supplied to an inventory tracking system for monitoring inventories of supplies consumed by the network. Examiner notes that usage of a printer relates specifically to the number of pages printed. In addition, to aggregate the usage, it must be done over a time period.

Coons et al., as described in detail above does not teach the usage time period is a moving average. Dictionary of Business Terms defines moving average as the average price of inventory, constructed on a fixed period, used to show trends for the latest interval. Dictionary of Business Terms goes on to give the example of the “past 30 days”.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the usage time period of Coons et al. by defining the the time period to be a moving average as taught by the Dictionary of Business Terms in order to show trends for the latest interval.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coons et al. in view Official Notice.

Art Unit: 3627

Examiner notes that Coons et al. teaches usage data from networked reprographic machines is supplied to an inventory tracking system for monitoring inventories of supplies consumed by the network. Examiner notes that usage of a printer relates specifically to the number of pages printed. In addition, to aggregate the usage, it must be over a time period.

Coons et al., as described in detail above does not teach calculating the average number of pages printed per month.

Examiner takes Official Notice that a month is an old and well known predefined time period used to tabulate information. For instance utility companies bill customers based on monthly usage, banks send out monthly statements and mortgage companies require monthly payments.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the usage time period of Coons et al. by defining the time period as a month as taught by Official Notice. One of ordinary skill in the art would be motivated to modify the references in order to provide users with a standard and well-established time frame.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3627

Claims 16, 18-19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coons et al. in view of Bardenheuer et al.

Examiner notes that the rejection here for claim 16 under 35 U.S.C. 103(a) is pursuant to MPEP 2112 which states that a rejection under 35 USC 102/103 can be made when the prior art product seems to be identical except that the prior art is silent to an inherent characteristic. There is nothing inconsistent in concurrent rejections for obviousness under 35 USC 103 and for anticipation under 35 USC 102.

Coons et al. teaches a printing device usage database that stores historical printing device usage, the historical printing device usage being a number of pages printed by a particular brand of printing device owned by a customer. Specifically, Examiner references column 2; line 66 – column 3; line 17, which teaches a local server and data store which captures and aggregates usage data associated with monitored assets of an enterprise. Coons et al. further teaches a remote server and data store which receives and stores the usage data from the local server and local data store.

Examiner notes that Coons et al. does not specifically teach that the remote data store contains usage information for a plurality of enterprises. However Examiner asserts that Coons et al. does contain teachings to support that it would be obvious for the remote data store to usage data for multiple enterprises. Support for this assertion is found on column 9; lines 25-43. This passage details the steps followed for Finance Company to retrieve information from the remote server. Specifically, step 2 states, “Finance Company clicks button on a page after selecting an enterprise for which a report is to be generated.” Examiner notes that Webster’s II New Riverside Dictionary defines select as: “To pick out or choose from a number of choices.”

Art Unit: 3627

Since the Finance company “selects” an enterprise, it is inherent that there are a plurality of enterprises (customers) to select from and therefore the remote server necessarily stores information from a plurality of enterprises (customers).

Examiner believes that the above evidence supports the idea that it would be obvious for one of ordinary skill in the art to modify the silent teaching of Coons et al. to include storing usage data on multiple customers in the remote data store. One of ordinary skill would be motivated to modify the teachings so as to have one central location where a Finance or Billing company could go to get usage data for any of their customers.

Coons et al. teaches a pricing module; and/or a pricing module configured to calculate a price of a printing device replaceable component for sale to a customer, the price being dependent upon the customer’s historical printing device usage.

Examiner references column 8; 49-52 which states that a billing company generates an invoice based on aggregated usage data associated with the assets. First Examiner notes that this represents a module used by the billing company to generate the invoice.

Further, Examiner notes that the invoice of Coons et al. is for consumables, this is supported on column 2; lines 50-56, where Coons et al. states that the purpose of the invention to improve upon systems that transmit requests for consumables but don’t support remote access to the usage data. Clearly the invoice is generated for a consumable (printing device replaceable component) based on a customer’s aggregated usage data (historical printing device usage).

Art Unit: 3627

Examiner asserts that aggregated usage, as applied above represents historical usage, as the usage must have already occurred in order for it to be aggregated or totaled. The system could not aggregate usage that has not happened.

Further, Merriam Webster's Collegiate Dictionary defines invoice as "a list of goods specifying the price." Thus, to generate an invoice or a list of goods specifying the price, a price necessarily will be calculated.

Therefore, Examiner asserts, the module of Coons et al. which generates an invoice based on aggregated usage data represents a pricing module configured to calculate the price of a printing device based on historical printing device usage.

Coons et al. teaches a usage module configured to calculate historical printing device usage for each customer (e.g. column 4; lines 16-18). Examiner notes that Coons et al.'s usage data aggregation system represents a usage module. Once again Examiner points out that aggregated data represents historical data since usage cannot be aggregated unless it is historical (i.e. happened already).

Coons et al. does not specifically mention a message transmission means for transmitting the calculated price of the printing device replaceable component to the customer (claim 16) wherein the message transmission means comprises a network connection (claim 18).

Bardenheuer et al. teaches that a customer request for invoice (Figure 7 and column 10; lines 59-60) triggers the system to provide an invoice to the user (Figure 8 and column 10; lines 66-67).

Art Unit: 3627

Examiner notes that the invoice is transmitted over the Internet, which represents a network connection as required by Claim 18.

Examiner once again points out that an invoice represents a list of prices. As such, a module that transmits an invoice is also a module that transmits a price. One of ordinary skill recognizes that a company would transmit an invoice or price in order to facilitate payment.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Coons et al. to include a module to transmit the invoice or price over the Internet as taught by Bardenheuer et al. One of ordinary skill in the art would have been motivated to combine the references in order to facilitate payment.

Coons et al. teaches an order center configured to receive a customer order for one or more printing device replaceable components as required by claim 19 (column 2; lines 39-56). Specifically Coons et al. teaches automatic or semi-automatic ordering over a communications network to a reorder site. The reorder site of Coons et al. represents an order center.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coons et al. in view of Bardenheuer et al. as applied to claim 16 above, and further in view of Hirst et al.

The combination of Coons et al. in view of Bardenheuer et al. as described above does not teach a recycling center to receive a depleted printing device replaceable component that has component memory integrated therewith in and to retrieve a page count from the component memory, that page count indicating a number of pages printed utilizing the printing device replaceable component.

Art Unit: 3627

Hirst et al. teaches consumable products are returned to the manufacturer for recycling upon exhaustion (column 1; lines 29-31). Hirst et al. further teaches storing information within the consumable memory which can be obtained by the manufacturer at a later time. The information can include number of pages printed since last consumable (column 3; lines 15-30). Examiner notes the above teachings of Hirst et al. represent replaceable component with memory for storing page count indicating the number of pages printed utilizing the printing device replaceable component. In addition, the teachings of Hirst et al. represent this a recycling center of a manufacturer who is able to receive the replaceable component and access the information in the memory.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Coons et al. in view of Bardenheuer et al. to include a recycling center to receive replaceable components and to retrieve page count information indicating the number of pages printed utilizing the replaceable component from the memory of the replaceable component as taught by Hirst et al. One of ordinary skill in the art would be motivated to combine the references as taught in order to provide a communication between the manufacturers of the consumable components regarding consumption rates (Hirst et al. column 2; lines 19-22).

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coons et al. in view of Bardenheuer et al. as applied to claim 16 above, and further in view of Dictionary of Business Terms.

Art Unit: 3627

Examiner notes that the combination of Coons et al. in view of Bardenheuer et al. teaches usage data from networked reprographic machines is supplied to an inventory tracking system for monitoring inventories of supplies consumed by the network. Examiner notes that usage of a printer relates specifically to the number of pages printed. In addition, to aggregate the usage, it must be done over a time period.

The combination of Coons et al. in view of Bardenheuer et al, as described in detail above does not teach the usage time period is a moving average. Dictionary of Business Terms defines moving average as the average price of inventory, constructed on a fixed period, used to show trends for the latest interval. Dictionary of Business Terms goes on to give the example of the "past 30 days".

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the usage time period of Coons et al. by defining the time period to be a moving average as taught by the Dictionary of Business Terms in order to show trends for the latest interval.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coons et al. in view of Bardenheuer et al. as applied to claim 16 above, and further in view of Official Notice.

Examiner notes that the combination of Coons et al. in view of Bardenheuer et al teaches usage data from networked reprographic machines is supplied to an inventory tracking system for monitoring inventories of supplies consumed by the network. Examiner notes that usage of a printer relates specifically to the number of pages printed. In addition, to aggregate the usage, it must be over a time period.

Art Unit: 3627

The combination of Coons et al. in view of Bardenheuer et al. as described in detail above does not teach calculating the average number of pages printed per month.

Examiner takes Official Notice that a month is an old and well known predefined time period used to tabulate information. For instance utility companies bill customers based on monthly usage, banks send out monthly statements and mortgage companies require monthly payments.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the usage time period of Coons et al. by defining the time period as a month as taught by Official Notice. One of ordinary skill in the art would be motivated to modify the references in order to provide users with a standard and well-established time frame.

Coons et al. teaches that an asset shall be construed broadly to include any shared peripheral device including, but not limited to printers, copiers, facsimile machines, scanners, modems, computers and storage devices. Coons et al. does not specifically mention Laser Printers as required by claim 23). Examiner notes that one of ordinary skill would recognizes that a laser printer is an old and well known peripheral device under the category of printer. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include a laser printer in the definition of asset in order to track the usage of this old and well known type of peripheral.

Response to Arguments

Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 3627

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

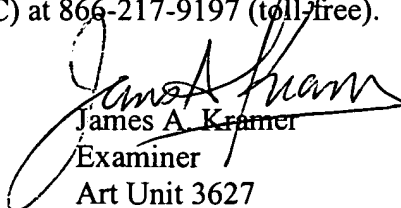
Patent Number 5,995,774 to Applegate et al. teaches a method and apparatus for storing data in a non-volatile memory circuit mounted on a printer's process cartridge.

Patent Number 4,551,00 to Kanemitsu et al. teaches a process kit and an image forming apparatus using the same.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Kramer whose telephone number is (703) 305-5241. The examiner can normally be reached on Monday - Friday (8AM - 5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on (703) 305-4716. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).


James A. Kramer
Examiner
Art Unit 3627
3/4/05

jak